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EXAMINER

BLAIR, DOUGLAS B

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/766,278	Applicant(s) JENNINGS ET AL.	
	Examiner DOUGLAS B. BLAIR	Art Unit 2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 January 0140.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-140 is/are pending in the application.
- 4a) Of the above claim(s) 103-106 and 135-140 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-58,60-102 and 107-134 is/are rejected.
- 7) ☒ Claim(s) 59 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

The applicant's amendments have overcome the rejection based on 112 2nd paragraph and the claim objections.

Response to Arguments

The arguments against the 101 rejections are not persuasive because the applicant does not positively define any of the claim elements in question as hardware. The applicant's specification never explicitly states a processor is hardware and in fact categorizes a processor as a type of monitor. The claimed routing processor could be implemented completely in software and still fall within the scope of the claim. With respect to the stream caster and the switch controller, the applicant's specification does not define a device to be only hardware and therefore the rejection is maintained.

The arguments with respect to the prior art are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 7-35, and 42-102 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

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Claim 1 and 7-9 directed towards a system comprising a stream routing processor and a stream caster. The applicant's specification does not provide any description of what a stream routing processor is nor does it provide any description of what a stream caster is. Given the applicant's vague disclosure it is reasonable to assume that these elements are software.

Claim 2 further comprises a plurality of stream casters and is interpreted as software for the same reasons as claim 1.

Claim 3 further comprises a switch controller. Page 51 of the applicant's specification describes a switch controller which is comprised only of software elements (broadband service controller, circuit database, human machine interface, and network manager).

Because claims 1-3 and 7-9 are directed towards software per se they do not fall into a statutory category of invention.

Claims 10-35 and 42-44 are directed towards a switch that is comprised only of a stream routing processor and a stream caster. As discussed in claim 1, these elements are software elements. As the applicant's claimed switch is directed towards only software it is treated as software per se and therefore does not fit into a statutory category of invention.

Claims 45-90 are directed towards a system comprising a stream routing processor and a stream caster and are therefore not patentable for the same reasons discussed with respect to claim 1.

Claims 91-101 comprise a stream routing processor and a stream caster with the addition of a broadband service controller, a human machine interface, and a network manager. As discussed with respect to claim 3, all of the elements are software elements.

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Claim 102 is directed towards a stream caster, a stream processor, and a switch controller. As discussed with respect to claims 1 and 3, these elements are all software.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Number 6,385,596 to Wiser et al.

As to claim 1, Wiser teaches a system for streaming media comprising: a stream routing processor configured to receive reservation data comprising a valid reservation identification and to transmit the valid reservation identification (**col. 19, lines 26-32, the content manager is the stream routing processor**); and a stream caster configured to receive a reservation identification, to receive the reservation data identifying the valid reservation identification from the stream routing processor, to validate the reservation identification using the valid reservation data, and, if valid, to stream at least partially a requested media (**col. 19, lines 8-10 and 33-43, the delivery server 118 is the stream caster and the voucher ID is the reservation**).

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As to claim 2, Wiser teaches the system of claim 1 further comprising a plurality of stream casters configured to stream media from the system **(col. 6, lines 33-36 mention multiple delivery servers)**.

As to claim 3, Wiser teaches the system of claim 1 further comprising a switch controller configured to monitor a state of a system resource **(this limitation is extremely broad and reads on a processor in a delivery server, for example)**.

As to claim 4, Wiser teaches the system of claim 1 further comprising media storage configured to store the media **(See Figure 1B)**.

As to claim 5, Wiser teaches the system of claim 1 further comprising a packet switch configured to transmit packets containing the media from the system **(Wiser teaches the use of the Internet so a packet switch is involved)**.

As to claim 6, Wiser teaches the system of claim 5 wherein the packet switch comprises an internet protocol packet switch **(Wiser teaches the use of the Internet so a packet switch is involved)**.

As to claim 7, Wiser teaches the system of claim 1 wherein the stream caster further is configured to transmit at least one information block comprising the reservation identification **(col. 19, lines 33-43)** and at least one member of a group comprising a session initiation, a session termination, and a viewing event for a session **(col. 24, lines 36-55)**.

As to claim 8, Wiser teaches the system of claim 7 wherein the session comprises at least one member of a group comprising an internet protocol session and a broadband connection **(col. 6, lines 15-27)**.

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As to claim 9, Wiser teaches the system of claim 1 wherein the stream routing processor further is configured to maintain a reservation state model comprising the reservation identification and at least one member of a group comprising a session initiation, a session termination, and a viewing event (**col. 24, lines 36-55**).

As to claim 10, Wiser teaches a switch (**the music distribution center in Figure 1B**) for streaming media comprising: a stream routing processor configured to receive signaling inquiring if the switch can stream requested media, to determine if the switch is configured to stream the requested media, and, if so to receive reservation data comprising a valid reservation identification (**col. 19, lines 26-32, the content manager is the stream routing processor**); and a stream caster configured to receive a reservation identification, to receive from the stream routing processor the reservation data identifying the valid reservation identification, to validate the reservation identification using the valid reservation data, and, if validated, to stream at least partially the requested media (**col. 19, lines 8-10 and 33-43, the delivery server 118 is the stream caster and the voucher ID is the reservation**).

As to claim 11, Wiser teaches the switch of claim 10 wherein the stream routing processor further is configured to monitor a state of the switch (**the delivery server is monitoring for voucher ID's which can be considered a "state of the switch"**).

Wiser teaches

the switch of claim 11 wherein the state comprises at least one member of a group comprising available bandwidth, required bandwidth for the requested media, version compatibility, storage capacity, and operating mode (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

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Claim 13

the switch of claim 10 wherein the stream routing processor further is configured to monitor a status of a media server.

Claim 14

The switch of claim 10 wherein the stream routing processor further is configured to transmit signaling to a routing processor identifying that the switch can provide the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**)

Claim 15: the switch of claim 10 wherein the stream routing processor further is configured to record a state change in a state model for a session (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

16. (Previously Presented) The switch of claim 15 wherein the state change identifies at least one member of a group comprising the requested media, a streamed media, the reservation identification, a duration of media streamed, and a viewing event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

17. (Original) The switch of claim 10 wherein:

the stream caster comprises a first media server and a second media server;

the first media server is configured to stream a first portion of the requested media; and the

second media server is configured to stream a second portion of the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

18. (Previously Presented) The switch of claim 17 wherein the stream routing processor is

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configured to record a state change comprising an identification of the first media server streaming the first portion and the second media server streaming the second portion (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

19. (Original) The switch of claim 10 wherein:

the switch comprises a second stream caster;

the stream caster is configured to stream a first portion of the requested media; and

the second stream caster is configured to stream a second portion of the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

20. (Previously Presented) The switch of claim 19 wherein the stream routing processor is configured to record a state change comprising an identification of the stream caster streaming the first portion and the second stream caster streaming the second portion (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

21. (Original) The switch of claim 10 wherein the stream routing processor is configured to transmit signaling to, and receive signaling from, the stream caster to determine if the stream caster is configured to stream the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

22. (Original) The switch of claim 21 wherein the stream routing processor determines that the stream caster is configured to stream the requested media and the stream routing processor is configured to transmit the reservation data to the stream caster and to transmit an acknowledgement to a routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col.**

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19, lines 8-10 and 26-43, and col. 24, lines 36-55).

23. (Original) The switch of claim 10 wherein the stream routing processor further is configured to transmit a message to the stream caster, to receive a response from the stream caster, and to process the response to determine if the stream caster is configured to stream the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

24. (Previously Presented) The switch of claim 10 wherein the reservation data comprises a play list and the stream routing processor is configured to transmit the play list to the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

25. (Original) The switch of claim 10 wherein the switch is configured to communicate with a routing processor and wherein the stream routing processor is configured to transmit signaling to, and receive signaling from, the routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

26. (Original) The switch of claim 10 wherein the stream routing processor is configured to communicate out-of-band to a broadband device (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

27. (Original) The switch of claim 26 wherein the broadband device comprises a set top box (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

28.(Original) The switch of claim 10 wherein the stream caster further is configured to accept a session upon receiving a valid reservation identification (**col. 6, lines 15-36, col. 14,**

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line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).

29. (Original) The switch of claim 28 wherein the stream caster is configured to process signaling received in the session to affect the media streaming (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

30. (Original) The switch of claim 29 wherein the signaling comprises at least one member of a group comprising a setup, a teardown, a status message, and a viewing event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

31. (Original) The switch of claim 29 wherein the session comprises at least one member of a group comprising an internet protocol session and a broadband connection (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

32. (Original) The switch of claim 10 wherein the stream caster is configured to report a state change to the stream routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

33. (Original) The switch of claim 10 further comprising a switch controller configured to monitor a state of a switch resource (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

34. (Original) The switch of claim 33 wherein the resource comprises a hardware component (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

35. (Original) The switch of claim 33 wherein the switch controller is configured to report to the stream routing processor at least one member of a group comprising a service impacting event and a capacity impacting event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines**

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8-10 and 26-43, and col. 24, lines 36-55).

36. (Original) The switch of claim 10 further comprising a media storage configured to store the media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

37. (Original) The switch of claim 10 further comprising a packet switch configured to transmit packets containing the media from the switch (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

38. (Original) The switch of claim 37 wherein the packet switch is configured for multicasting of a live event or a simulated live event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

39. (Original) The switch of claim 10 further comprising a packet switch configured to transmit packets containing signaling within the switch (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

40. (Original) The switch of claim 39 wherein the packet switch comprises an internet protocol packet switch (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

41. (Original) The switch of claim 39 wherein the packet switch is configured to transmit and receive out-of-band signaling (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

42. (Original) The switch of claim 10 wherein the reservation data comprises a play list (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

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43.(Original) The switch of claim 10 wherein the stream routing processor is configured to transmit and receive signaling in-band (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

44. (Original) The switch of claim 10 wherein the stream routing processor is configured to transmit and receive signaling out-of-band (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

45. (Currently Amended) A system for streaming media to a viewer comprising:
a stream caster configured to accept a session from the viewer to stream at least partially a requested media upon both receiving and validating a reservation identification using a valid reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**); and a stream routing processor configured to determine if the stream caster is configured to stream the requested media, and, if so, to receive reservation data comprising the valid reservation identification and to transmit the valid reservation identification to the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

46. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to communicate signaling to and from the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

47. (Original) The system of claim 46 wherein the signaling comprises the reservation data (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

48. (Original) The system of claim 45 wherein the stream routing processor

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comprises a switch load controller configured to communicate signaling to and from a routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

49. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to communicate with a resource manager to determine if the stream caster has a resource available to stream the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

50. (Original) The system of claim 49 wherein the resource comprises at least one member of a group comprising a media server, processing capacity, and bandwidth (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

51. (Original) The system of claim 45 wherein the stream routing processor comprises a switch load controller configured to record a status of at least one event or at least one device in the system (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

52. (Previously Presented) The system of claim 51 wherein the status comprises at least one member of a group comprising an active media stream, not to exceed capacity, and current capacity (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

53. (Original) The system of claim 45 wherein the stream routing processor comprises a switch resource manager configured to monitor and to record status of resources in the system (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

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54. (Original) The system of claim 53 wherein the resources comprise at least one member of a group comprising a stream caster, a media player, bandwidth, current capacity, and not to exceed capacity (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

55. (Original) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to maintain a reservation state model for each attempted reservation using the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

56. (Original) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to maintain a reservation state model for a session and to receive from the stream caster and record each state change, wherein the state model identifies the session using the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

57. (Original) The system of claim 56 wherein the state change comprises at least one member of a group comprising a setup, a teardown, and a viewing event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

58. (Original) The system of claim 45 wherein the stream routing processor comprises a viewer session control configured to create at least one information block for a session (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

60. (Original) The system of claim 45 wherein the stream routing processor comprises a log data system configured to transmit log data from the system (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

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61. (Original) The system of claim 60 wherein the log data comprises at least one member of a group comprising an information block and a signaling log (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

62. (Original) The system of claim 60 wherein the log data comprises at least one member of a group comprising a historical pull interface and a real time push interface (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

63. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to transmit session and state information to the stream routing processor and to receive and processes signaling from the stream routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

64. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to generate signaling logs and media server logs (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

65. (Original) The system of claim 45 wherein the stream caster comprises a signal wrapper subsystem configured to receive and process signaling from the viewer and to transmit signaling and media to the viewer (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

66. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session controller configured to monitor and store session information and to transmit session information to the stream routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

67. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session

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controller configured to obtain status information from a media server (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

68. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a session controller configured to transmit and receive signaling to and from the stream routing processor, including the valid reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

69. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive and process raw signaling from the viewer (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

70. (Previously Presented) The system of claim 69 wherein the signal wrapper subsystem comprises a signal proxy configured to transmit the raw signaling for use by the stream routing processor to maintain a state model (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

71. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive the reservation data, including the valid reservation identification, and to validate the reservation identification received from a viewer using the valid identification reservation (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

72. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to accept or deny an attempted session based on validating the received reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

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73. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a signal proxy configured to receive signaling for a session and to transmit the signaling to a media server **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

74. (Previously Presented) The system of claim 73 wherein the signal proxy further is configured to transmit the signaling to another media server if the media server cannot stream the requested media **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

75. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to bind a media server to a public internet protocol address **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

76. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to transmit media streamed from a media server to the viewer **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

77. (Original) The system of claim 76 wherein the stream proxy further is configured to transmit media streamed from another media server to the viewer if the media server is not able to stream the media **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

78. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a stream proxy configured to receive signaling from the viewer and to transmit the signaling to a media server **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

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79. (Original) The system of claim 78 wherein the signaling comprises a status of the streaming media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

80. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a media server configured to stream media to the viewer (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

81. (Original) The system of claim 80 wherein the media server further is configured to generate at least one media log comprising the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

82. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a media log configured to store media logs generated by a media server (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

83. (Original) The system of claim 65 wherein the signal wrapper subsystem comprises a data collector configured to collect raw signaling and to process the raw signaling to create at least one signaling log (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

84. (Original) The system of claim 83 wherein data collector further is configured to transmit the signaling log to a log data system (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

85. (Previously Presented) The system of claim 45 wherein the stream caster comprises log data system configured transmit from at least one member of a group comprising signaling logs and media logs (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43,**

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and col. 24, lines 36-55).

86. (Previously Presented) The system of claim 85 wherein the log data system comprises a log data control configured to receive the signaling logs, to control transmitting the signaling logs from the system, and to control storage of the signaling logs when the log data system is configured to transmit from the signaling logs (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

87. (Previously Presented) The system of claim 86 wherein the log data system comprises a log storage configured to store the signaling logs (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

88. (Previously Presented) The system of claim 86 wherein the log data system comprises a real-time push interface configured to transmit the signaling logs from the system in real time (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

89. (Original) The system of claim 85 wherein the log data system comprises a historical pull interface configured receive a request for signaling logs and to transmit requested signaling logs (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

90. (Original) The system of claim 85 wherein the log data system comprises a file transfer protocol interface configured to transmit a closed signaling log from the system (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

91. (Original) The system of claim 45 further comprising a broadband service controller configured to monitor a broadband connection to determine if the broadband connection is active

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(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).

92. (Previously Presented) The system of claim 45 further comprising a broadband service controller configured to monitor a broadband connection to determine if the broadband connection has a quality of service **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

93. (Original) The system of claim 45 further comprising a broadband service controller configured to record a state of the broadband connection **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

94. (Original) The system of claim 93 wherein the broadband service controller comprises a circuit database configured to store a status of a broadband connection **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

95. (Original) The system of claim 45 further comprising a human machine interface configured to enable human access to configure the system **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

96. (Original) The system of claim 95 wherein the human machine interface comprises at least one member of a group comprising a web browser, a graphical based terminal session, and a command interface **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

97. (Previously Presented) The system of claim 45 further comprising a network manager configured to monitor status of a component in the system **(col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

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98. (Original) The system of claim 97 wherein the network manager comprises a stream caster controller configured to monitor and to report status of the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

99. (Original) The system of claim 97 wherein the network manager comprises an SRP controller configured to monitor and to report status of the stream routing processor (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

100. (Original) The system of claim 97 wherein the network manager comprises a media storage controller configured to monitor and to report status of a media storage (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

101. (Original) The system of claim 97 wherein the network manager comprises a signaling controller configured to monitor and to report status of a signaling component (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

102. (Currently Amended) A switch for streaming media to a viewer comprising: a stream caster configured to accept a session from the viewer to stream at least partially a requested media upon receiving and validating a reservation identification using a valid reservation identification; a stream routing processor configured to determine if the stream caster is configured to stream the requested media, and, if so, to receive reservation data comprising the valid reservation identification and to transmit the valid reservation identification to the stream caster; and a switch controller configured to monitor the stream caster and to notify the stream routing processor of a status of the stream caster (**col. 14, line 59-col. 15, line 18, the applicant's specification provides no limiting definition of a "switch controller" so the functionality performed by the content manager reads on this limitation**).

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As to claim 107, Wiser teaches a method for streaming media from a switch comprising: determining if a stream caster is configured to stream a requested media; receiving reservation data comprising a valid reservation identification at the stream caster; and accepting a session to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification (**col. 14, line 59-col. 15, line 18 and col. 19, lines 8-10 and 26-43**).

108. (Previously Presented) The method of claim 107 wherein the determining comprises transmitting a message to the stream caster inquiring if the stream caster is configured to stream the requested media and receiving another message from the stream caster at a stream routing processor acknowledging the message inquiring if the stream caster is configured to stream the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

109. (Original) The method of claim 108 further comprising transmitting a third message to a routing processor identifying the stream caster as being configured to stream the requested media and identifying an address of the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

110. (Original) The method of claim 109 further comprising receiving at the stream routing processor from the routing processor a fourth message comprising the reservation data (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

111. (Previously Presented) The method of claim 109 wherein the address comprises an internet protocol address (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-**

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43, and col. 24, lines 36-55).

112. (Original) The method of claim 107 further comprising receiving the reservation identification at an address of the stream caster and, if validated, accepting the session at the address (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

113. (Original) The method of claim 112 wherein the address is transmitted from the stream routing processor after the stream routing processor determined that the stream caster is configured to stream the requested media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

114. (Original) The method of claim 107 further comprising receiving a setup message at the stream caster and acknowledging the setup message (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

115. (Original) The method of claim 107 further comprising streaming the requested media, at least partially (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

116. (Currently Amended) The method of claim 115 further comprising receiving a viewing event and changing the requested media being streamed accordingly (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

117. (Original) The method of claim 107 further comprising using a packet switch to communicate between the stream routing processor and the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

118. (Original) The method of claim 107 further comprising using a packet switch to transmit

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requested media from the stream caster (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

119. (Original) The method of claim 107 further comprising receiving at the stream caster in-band signaling (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

120. (Original) The method of claim 107 further comprising receiving at the stream routing processor out-of-band signaling (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

121. (Original) The method of claim 107 further comprising using in-band signaling to communicate with a viewer (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

122. (Original) The method of claim 107 further comprising using out-of-band signaling to communicate with a viewer (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

123. (Original) The method of claim 107 further comprising receiving a teardown message at the stream caster and terminating the session (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

124. (Original) The method of claim 107 further comprising transmitting at least one signaling log from the stream caster, the signaling log comprising the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

125. (Original) The method of claim 124 wherein the signaling log comprises at least one

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member of a group comprising setup data, termination data, and a viewing event (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

126. (Original) The method of claim 107 further comprising transmitting at least one information block from the stream routing processor, the information block comprising the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

127. (Original) The method of claim 126 wherein the information block comprises at least one member of a group comprising setup data, termination data, a viewing event, a media server identification, and an identification of streamed media (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

128. (Previously Presented) The method of claim 107 further comprising transmitting a plurality of information blocks from the stream routing processor, each of the plurality of information blocks each comprising the reservation identification (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

129. (Previously Presented) The method of claim 128 further comprising transmitting each information block at the occurrence of at least one member of a group comprising setup, termination, a viewing event, a configurable period of time (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55**).

130. (Original) A method for streaming media from a switch comprising:
receiving at a stream caster reservation data comprising a valid reservation identification;
and terminating an attempted session to stream requested media upon receiving and
invalidating a reservation identification using the valid reservation identification (**col. 6, lines 15-**

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36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).

131. (Original) The method of claim 130 further notifying a stream routing processor that the stream caster received an invalid reservation identification and that the attempted session was terminated (**col. 6, lines 15-36, col. 14, line 59-col. 15, line 18, col. 19, lines 8-10 and 26-43, and col. 24, lines 36-55).**

As to claim 132, Wiser teaches a method for streaming requested media from a switch comprising: receiving signaling inquiring if the switch is configured to stream the requested media; determining if the switch is configured to stream the requested media, and, if so, acknowledging the inquiry; receiving reservation data comprising a valid reservation identification; receiving a reservation identification; validating the reservation identification using the valid reservation data, and, if validated, streaming at least partially the requested media (**col. 14, line 59-col. 15, line 18 and col. 19, lines 8-10 and 26-43).**

As to claim 133, Wiser teaches a method for streaming media to a viewer comprising: determining if a streaming device is configured to stream requested media, and, if so, receiving reservation data comprising a valid reservation identification and transmitting the valid reservation identification; and accepting a session from the viewer at the streaming device to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification (**col. 14, line 59-col. 15, line 18 and col. 19, lines 8-10 and 26-43).**

As to claim 134, Wiser teaches a method for streaming media from a switch comprising: determining at a stream routing processor if a streaming device is configured to stream requested media; receiving reservation data comprising a valid reservation identification and transmitting

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the valid reservation identification to the streaming device; accepting a session to stream at least partially the requested media upon receiving and validating a reservation identification using the valid reservation identification; and monitoring the streaming device and notifying the stream routing processor of a status of the streaming device (**col. 14, line 59-col. 15, line 18 and col. 19, lines 8-10 and 26-43**).

Allowable Subject Matter

Claim 59 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS B. BLAIR whose telephone number is (571)272-3893. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Douglas B Blair/
Primary Examiner, Art Unit 2442